

AMENDMENTS

IN THE CLAIMS:

Please amend claim 1 as follows:

1. (Twice amended) A method of evaluating the atherosclerotic state of an individual having at least one risk factor associated with atherosclerosis, comprising the steps of:

- (a) collecting a tissue of interest from said individual;
- (b) determining the amount of mitochondrial DNA damage in said tissue of interest; and
- (c) comparing the amount of mitochondrial DNA damage in the tissue of interest from said individual to the amount of mitochondrial DNA damage in a tissue of interest from a control individual who does not have atherosclerosis, wherein a greater amount of mitochondrial DNA damage in said individual at risk than in said control individual is indicative of atherosclerosis in said individual, wherein said mitochondrial DNA damage is assessed by a measurement selected from the group consisting of measurement of mitochondrial mRNA production, measurement of mitochondrial protein production, measurement of changes in mitochondrial oxidative phosphorylation and measurement of changes in mitochondrial ATP production.